

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today
(1) was not written for publication in a law journal and
(2) is not binding precedent of the Board.

Paper No. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte TAKASHI NAITO and TAMOTSU MAEDA

Appeal No. 96-0496
Application 08/131,332¹

ON BRIEF

Before KRASS, SMITH, JERRY and BARRETT, Administrative Patent Judges.

KRASS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 6, 10, 17 and 18 and 5, 9, 11, 12 and 16, the latter five having been amended by appellants in an amendment and reply brief, filed October 5, 1995 (Paper No. 15), which amendment and reply brief have been entered by the examiner. Also, in that amendment, claims 1 through 4, 7, 8, 13 through 15 and 19 have

¹ Application for patent filed October 4, 1993.

Appeal No. 96-0496
Application No. 08/131,332

been canceled. Thus, the claims on appeal before us are claims 5, 6, 9 through 12 and 16 through 18, all the claims pending in the application.

The invention is directed to a disk cartridge best illustrated by reference to representative independent claim 5, reproduced as follows:

5. A disk cartridge, comprising:

a cartridge casing;

an overwrite type magneto-optical disk rotably mounted in the cartridge casing; and

magnetic initializing means, including a yoke and magnetic means disposed within the cartridge casing proximate to a radial portion of the overwrite type magneto-optical disk so as to generate a magnetic field sufficient for effecting overwrite operation of the overwrite type magneto-optical disk;

wherein the yoke of the magnetic initializing means comprises an upper arm and a lower arm arranged such that a radial portion of the overwrite type magneto-optical disk passes between the upper and lower arms of the magnetic initializing means according to rotation thereof; and

wherein the magnetic means comprises a pair of upper initializing magnets disposed in parallel on the inner surface of the upper arm of the yoke and a pair of lower initializing magnets disposed in parallel on the inner surface of the lower arm of the yoke both of the upper and lower pairs of the initializing magnets being arranged in parallel to a radial direction of the disk such that a radial portion of the overwrite type magneto-optical disk passes between the initializing magnets during rotation thereof.

The examiner relies on the following references:

Nemoto et al.	4,750,064	Jun. 7, 1988
(Nemoto)		

Appeal No. 96-0496
Application No. 08/131,332

Tadokoro et al. (Tadokoro)	4,908,809	Mar. 13, 1990
Kato et al. (Kato)	4,970,618	Nov. 13, 1990
Ishii	5,206,844	Apr. 27, 1993

Claims 5, 6, 9 through 12 and 16 through 18 stand rejected under 35 U.S.C. ' 103. As evidence of obviousness, the examiner cites Tadokoro with regard to claims 5 and 6, adding Nemoto with regard to claims 9 through 12 and applying Tadokoro together with Kato with regard to claims 16 through 18.

Reference is made to the briefs and answers for the respective positions of appellants and the examiner.

OPINION

We reverse.

We agree with the examiner that Tadokoro clearly teaches a disk cartridge with a cartridge casing, an overwrite type magneto-optical disk and a magnetic initializing means, as set forth in independent claims 5, 9, 11, 12 and 16, as well as the yoke comprising an upper arm and a lower arm arranged as recited in independent claims 5, 9, 11 and 12.

However, the subject matter of each of the independent claims differs from that taught by Tadokoro in that which is recited in the last paragraph in each claim. The examiner recognizes these differences but contends that the claimed

subject matter as a whole would have been obvious, within the meaning of 35 U.S.C. ' 103. For the following reasons, we disagree.

INDEPENDENT CLAIM 5

While Tadokoro discloses a "magnetic means" (8 in Figure 3; 8a and 8b in Figure 4), claim 5 requires "a *pair* of upper initializing magnets disposed in parallel on the inner surface of the upper arm of the yoke and a *pair* of lower initializing magnets disposed in parallel on the inner surface of the lower arm of the yoke..." [emphasis ours].

In order to provide for a *pair* of magnets in Tadokoro, the examiner urges us to incorporate the bias magnet 9 disclosed therein with the initializing magnet 8. However, not only has the examiner failed to provide us with a cogent reason for doing so (the rationale of "to increase and stabilize the effect of the magnetic field of the initializing magnets" on page 4 of the supplemental answer is not persuasive), but Tadokoro actually teaches away from making such a combination. The bias magnet 9 is taught by Tadokoro as being part of the prior art to him and Tadokoro's disclosed invention "eliminates the need for an external bias magnet 9 as in the prior art" [column 6, lines 14-15]. Further, at column 6, lines 20-24, Tadokoro states that

...since the initializing magnet 8 is built into the housing 11 of the information-carrying medium...there is

no need to mount an initializing magnet inside the optical reading and writing apparatus.

Clearly then, it is not reasonable for the examiner to incorporate magnets 8 and 9 of Tadokoro in any manner to result in the pairs of magnets recited in independent claim 5.

In response to appellants' arguments, the examiner then explains that it would have been obvious to replace the upper and lower initializing magnets 8a and 8b of Tadokoro with pairs of magnets because "mere duplication of the essential working parts of a device involves only routine skill in the art" [page 10-supplemental answer]. We disagree. The use of pairs of magnets, as claimed, results in different magnetic fields and the use of such pairs of magnets is functionally different from the use of a single magnet on each arm of the yoke. Appellants' modification of the prior art through the use of pairs of magnets is more than a "mere duplication of Yparts." The examiner has not shown, to our satisfaction, why it would have been obvious to replace each single magnet on each arm of the yoke, as disclosed by Tadokoro, with a pair of magnets, as set forth in independent claim 5.

Accordingly, we will not sustain the rejection of claims 5 and 6 under 35 U.S.C. ' 103.

INDEPENDENT CLAIM 9

This claim requires that the upper and lower arms of the yoke be "respectively attached to indentations formed in the

material of the cartridge casing at facing upper and lower sides thereof." See Figure 3(a) of the instant disclosure.

Recognizing this deficiency in Tadokoro, the examiner cites Nemoto, noting the disclosure therein of a yoke 7 and a core member 6 having indentations in which the yoke is attached. The examiner contends that it would have been obvious to apply this teaching of Nemoto to Tadokoro in order to provide for attachment of the upper and lower arms of the yoke in Tadokoro to indentations formed in the material of the cartridge. The examiner's rationale is that this would

(1) secure the yoke with the cartridge housing, (2) support the casing of the disk cartridge to provide a stronger disk cartridge in order to protect the inner parts of the cartridge and (3) to reduce the thickness and the material of the cartridge housing [page 6-supplemental answer].

The examiner's rationale appears to be based more on hindsight gleaned from appellants' disclosure than from any teaching or suggestion from the applied references. The yoke 7 is not attached to any indentations "formed in the material of the cartridge casing," as required by claim 9. The indentations in Nemoto are in the core member 6 which appears to rotate with the spindle 4. The core member 6 is not the cartridge casing. Accordingly, we will not sustain the rejection of claim 9 or 10 under 35 U.S.C. ' 103.

INDEPENDENT CLAIMS 11 AND 12

Independent claim 11 requires that the upper and lower arms of the yoke be "respectively provided with openings therein for attachment to facing upper and lower sides respectively of the cartridge casing via ultrasonic welding." See instant Figure 3(b).

Independent claim 12 requires that the upper and lower arms of the yoke be "respectively affixed to facing upper and lower sides of the cartridge casing via an outsert molding process such that the upper and lower arms are embedded in a material of which the cartridge casing is formed." See instant Figure 3(c).

The examiner contends that it would have been obvious to attach the upper and lower arms of the yoke of Tadokoro, as modified by Nemoto, "by an adhesive[,] or by an ultrasonic welding with openings or by an outsert molding process" [page 7-supplemental answer] because these are "well known means to rigidly secure two components." We disagree.

The rejection of claims 11 and 12 must fall because the examiner's premise, i.e. that Tadokoro is properly modified by the teaching of Nemoto, is flawed for reasons supra. There is clearly no teaching or suggestion by either Tadokoro or Nemoto, or a combination thereof, of affixing the arms of the yoke in Tadokoro either by ultrasonic welding, by providing the arms with openings, or by an outsert molding process, as claimed.

Accordingly, we will not sustain the rejection of either independent claim 11 or independent claim 12 under 35 U.S.C. ' 103.

INDEPENDENT CLAIM 16

Independent claim 16 requires a support portion "wherein a support portion for supporting a peripheral edge of the overwrite type magneto-optical disk is projected from at least one of facing upper and lower sides of the cartridge casing."

The examiner relies on Kato's teaching of the interconnection of bosses 15 and cylindrical portions 16 for concluding that it would have been obvious to provide the cartridge of Tadokoro with corner support portions, the rationale being "to make the housing stronger" [page 8-supplemental answer]. We disagree.

The bosses and cylindrical portions of Kato provide for the interconnection of disk cartridge casings. However, there is no indication, teaching or suggestion by Kato that these "support portions" act, in any manner, to support "a peripheral edge of the overwrite type magneto-optical disk," as claimed.

Accordingly, we will not sustain the rejection of claims 16 through 18 under 35 U.S.C. ' 103.

CONCLUSION

We have not sustained the rejection of claims 5, 6, 9 through 12 and 16 through 18 under 35 U.S.C. ' 103.

Appeal No. 96-0496
Application No. 08/131,332

Accordingly, the examiner's decision is reversed.

REVERSED

Errol A. Krass)	
Administrative Patent Judge)	
)	
)	
)	
Jerry Smith)	BOARD OF PATENT
Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
)	
)	
Lee E. Barrett)	
Administrative Patent Judge)	

Appeal No. 96-0496
Application No. 08/131,332

Philip M. Shaw, Jr.
Limbach & Limbach
2001 Ferry Building
San Francisco, CA 94111-4262